# Shipping Handling Handling



Package testing is a year-round occupation at these laboratories in New York. What the technicians are doing is told on page 10.

JULY 1952



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\*These are trade names used by various manufacturers to describe their filament imbedded tages.

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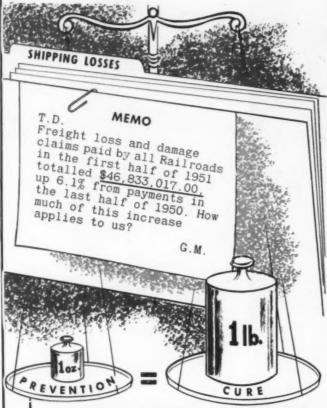
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#### Packing

#### A Punch. By S. H.

GUSTAV Metzman, of New York City, president of the New York Central System, recently paid tribute to railroad freight claim departments for meeting "a challenge of unprecedented proportions" that World War II and its aftermath brought on in loss and damage work

Addressing the annual meeting of the Freight Claim Division of the Association Railroads at the Hotel Statler in N. Y., Mr. Metzman declared that railroad claim men had demonstrated ingenuity and resourcefulness in utilizing better methods of handling claims, which in 1951 were down more than 25 per cent dollarwise from the postwar peak

"Investigative procedures were streamlined, red tape which once seemed essential was hacked away and office procedures were revolutionized by the imaginative application of mechanized equipment. "Mr. Metzman declared.

Through such methods, the backlog of claims confronting the railroads in the early postwar years has been whittled down, the railroad president said.

Turning to damage prevention efforts of the railroads, Mr. Metzman said that at the same time that claim men were struggling to keep up with "the steady stream of cases thrown at them." they were developing a new and increased consciousness of the correlation between claim work and the parallel activity of loss and damage prevention.

Mr Metzman pointed out that the interchange of information between the two fields has been consistently broadened and that it has become standard practice to ferret out of every claim file any scrap of information which could be useful in preventing freight damage in the future. Conversely, he continued, as prevention men have acquired new information as to the causes and naure of various kinds of loss and damage, they have frequently been able to give claim departments new and sounder principles on which to base claim settlements.

Reminding the claim men that the reduction of freight of freight loss and damage and the prompt setlement of claims show up directly in customer good will, Mr. Metzman said that the railroads, determined to add to progress made thus far, will not rest until the highest attainable level of safe shipping is reached.



Direct air-freight services could conceivably connect inland cities of the United States and foreign countries without first stopping at our shore line,

(Continued on Page 26)



**IULY, 1952** 

Vol. 17, No. 7

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# Shipping MANAGEMENT

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JULY, 1952 VOLUME 17 NUMBER 6

# RAIL LOSSES GO DOWN

## But Much Can Still Be Done

Says HENRY H. PRATT General Traffic Manager Crucible Steel Company of America

Railroad men and shippers alike must share the responsibility of heavy and unnecessary losses and damage of rail-borne freight, declared Henry H. Pratt, general traffic manager of the Crucible Steel Company of America, in a speech before the Raritan Traffic Club at New Brunswick, New Jersey, last Spring. Mr. Pratt pointed to a reduction of loss and damage claims from \$135,000,000 in 1948 to about \$100,000,000 in 1951, but said the latter figure is still far in excess of what it could be if all would put their shoulders to the wheel to stamp out this economic waste. Selected passages from Mr. Pratt's speech follow:

EVERY POUND OF THE PRODUCTION of American industry is sorely needed for the purpose for which it is made, and to waste it, heedlessly or otherwise, is another invitation for economic disaster, and a further contribution to the inflationary spiral.

When we consider the volume of shipments moving by other carriers who do not make public complete information about these losses, such as the several hundred truck lines; the inland, coastwise and overseas water carriers; the air lines, and the Postal Department, it would indicate the total annual loss to American production to be over a quarter of a billion dollars.

A further study of the figures released by the railroads shows that about \$40 millions is lost on freight in packages; about \$25 millions on freight not in packages; concealed loss or damage, and other causes taking up the balance. Approximately 20% of the railroad losses are on less than carload shipments.

#### All Groups Are Interested

All monies used by any type of carrier, except the Postal Department, to pay loss or damage claims, comes out of its gross freight revenues. Freight revenue is derived from the rate cost per 100 pounds, which is paid by the owner of the goods to the carrier for transportation. All claim payments thereby have a direct affect upon the measure of the rate which is charged. Inasmuch as the users of transportation are paying their own claims, indirectly, it becomes paramount for them to do much more than they have done in the past to reduce these losses. This includes the producer and the shipper, as well as the buyer, owner and consignee.

Articles lost or damaged in transit are not easily or economically replaced. The failure to receive them at destination, in useable condition, disrupts production schedules, causes unemployment, wastes valuable man-hours, and may cost the producer a good customer. So we see that producers and shippers not only have an interest, but a definite responsibility to help reduce the cost of this waste. There are several ways by which this can be accomplished. It first is important that each producer organize control over all factors related to his operation, including the packing, packaging, marking, securement, loading and handling. Second, an industry-wide organization is required to conduct research, develop and standardize

(Continued on Page 20)

#### Cover of the Month

The scene of busy activity shown on our cover photograph this month represents the kind of activity which goes on in a package testing laboratory every day in the year, but is something of a phantasy in that the amount of activity abown in this photo almost never takes place simultaneously in a testing laboratory. Be that as it may, this photograph is an excellent illustration of what goes on one time or another throughout the year at Container Laboratories. Inc., in New York, Chicago and San Francisco. Two of the best known experts in the packaging fields are among the models who posed for this illustrative picture. In left foreground, we see Mr. Alfred W. Hoffman kneeling as he inscribes a reading from the seven foot revolving drum. The small figure leaning in the rear center of the photograph with a paper in his hand is Mr. Allyn Beardsell looking at the reading from a compression tester. Both of these gentlemen are associated with Container Laboratories.

Can you recognise most of the other tests being illustrated? If not, here goes:

The gentleman on the left behind the revolving drum is standing on a vibration tester and is recording a reading. The box suspended in the middle of the floor is the Heavy Article subjected to a drop test.

The laboratory technician to the right of the heavy drop tester is about to let a can go from an Acme drop tester which tests light articles.

At the extreme left foreground in the corner is a scale, a most essential piece of testing laboratory equipment, and the young man looking intently down at the counter in the right foreground is recording a weight on the table balance. Behind this young man another laboratory technician is operating an incline impact tester which is not visible in this photograph.

Doors leading to two different conditioning rooms which contain numerous other testers may be seen in the photo graph. In the left rear, the outer walls of the conditioning room may be seen. In the extreme rear (center) is the door to the pre-conditioning room. The pre-conditioning room is a high temperature and low humidity room. The conditioning room is one where the material to be tested reaches moisture content equilibrium in a controlled atmosphere. The conditioning room is kept at 50% relative humidity and 73° F. temperature constantly. This sets up the

(Continued on Page 27)



# Independent Science of

DURING THE LAST thirty years or so the importance of packaging and shipping containers has steadily grown, until now it comprises a significant aspect of the profit-and-loss picture in the manufacture and sale of most products. Paralleling this group in packaging generally, has been the necessary and equally important growth and diversification of package testing devices, laboratory testing departments of large companies, and last, but not least, the independent package testing laboratories.

It is these latter organizations which provide information about aspects of packing, packaging and shipping room procedures that are beyond the facilities of small and medium-sized companies, and often beyond the capacities of the company-sponsored testing departments.

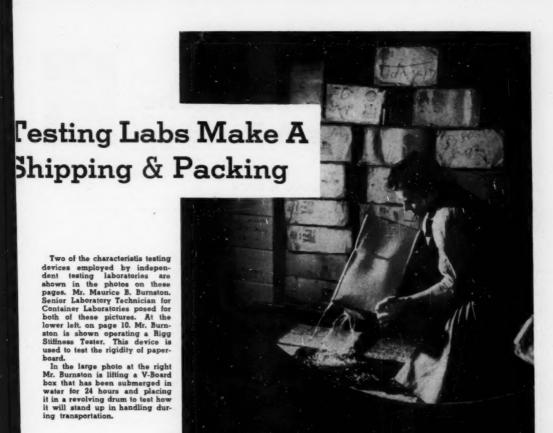
Through the courtesy of one such independent testing organization, Container Laboratories, Inc., and its President, Henry J. Howlett, a renowned authority in the field of packaging and shipping, we are enabled to present a general outline of the functions and activities of such a typical independent container testing organization. Mr. Alfred W. Hoffman, an associate of Container Laboratories' Inc., made possible much of the information herein presented, and valuable assistance was rendered by Mr. Maurice B. Burnston, Senior Laboratory Technician.

An independent package testing laboratory which is thoroughly equipped, and has the personnel to do an all-around operation performs far more than a testing operation. One way of viewing the variety and depth of its work is to examine the major type of jobs a typical laboratory does. These include:

(1) Quality control work. This work is performed substantially for box manufacturers, on a regular basis, to maintain the quality of containers and boxes of all kinds, as well as the raw stock. This is essentially a policing operation.

(2) Isolated tests of specific items for many different companies. Much of the important discoveries come from this work.

(3) Field Survey Work. Experts go into a plant



to check the efficiency of the entire shipping and packing operation. The shipping room and the actual processing of packages may require changing and improvement. These improvements are blueprinted by the laboratory's engineers. Not only will packages themselves be re-designed, new materials introduced, shapes and weights changed, but the method of exterior packing and the equipment used will be studied and revised.

#### IBM Card File Is Invaluable

At least one laboratory, Container Laboratories, Inc., has a prepared list of hundreds of thousands of results of tests, compiled during years of research. These lists are kept on file on IBM cards, where they can be referred to instantaneously. Thus, if a customer comes in with a specific problem an immediate check can be made to see if the particular problem or one sufficiently similar to offer a solution has been solved before. This often saves valuable time and money for the

customer, and is one of the most significant contributions of the independent testing laboratories to the progress of packaging.

Just what is meant by "containers" and "material testing" has been described in a recent booklet called "How Good Is Your Package!" According to this booklet:

#### "Containers" and "Material Testing"

"... Conducting studies of containers in actual use is a long and difficult procedure. Trial shipments can be made before a package is adopted but since conditions cannot be controlled, a great number of such tests must be made to assure sound and conclusive results and this, of course, is costly both in time and money.

"In the laboratory, however, conditions can be comtrolled exactly and actual hazards of transportation and handling can be simulated closely. Thus if tests

(Continued on Page 27)

# Making Use Of The Pallet As A Package

BY HARLAND R. BLACK Manager, Materials Handling Division

Traffic Department National Biscuit Company

Using the pallet as a carrying medium, many such small bundles may be picked up and transported in one operation with powered materials-handling equipment. This method of handling materials represents the Unit Load principle which has in recent years received widespread adoption. In general, unit loads are formed on pallets or skid platforms and material may be palletized or placed on skids either at the receiving dock of the user's plant where subsequent intra-plant movements are accomplished by industrial trucks, or at the point of manufacture and shipped via one of the modes of transportation to its ultimate destination.

When materials are palletized or placed on skids for shipment by the manufacturer, it is logical to assume that the commodity must be secured to the pallet or skid with steel strapping, or by other means, in order to ensure safe arrival at destination. When a pallet is used for this purpose, such a unit load may then be considered as a Pallet Package, according to our interpretation of the subject.

By making use of the Pallet as a Package, it is possible to mechanize handling operations through use of modern materials-handling equipment, such as battery — or gasoline — powered fork lift trucks, or motorized and hand-operated pallet trucks.

Some of the advantages to be gained through use of materials-handling equipment are as follows:

- Reduced product damage because of less manhandling of individual packages.
- Promotion of cleanliness and other characteristics of good housekeeping.
- Improved morale of the employees, as a result of having decreased the manual energy required to perform their work.

- Lower packaging costs resulting from a decrease in the number of smaller units to be packaged.
- Reduced inventory-taking time and cost by use of uniform loads.
- Reduced handling costs because less time is consumed when moving larger units of material at one time by mechanical equipment.
- Increased capacity of storage areas, due to hightiering, unless, of course, building limitations prohibit this practice.
- Quick and easy transferral of palletized material from one warehouse to another, or between locations within a warehouse when necessity demands such movements.
- More efficient utilization of shipping and receiving docks due to decreased time for loading and unloading railroad cars and motor trucks.
- 10. In some specific instances, as with the automatic carton-forming machines used in NABISCO bakeries, greater machine efficiency is obtained as a result of less damaged material.

National Biscuit Company operates two carton plants, producing unfolded, die-cut carton blanks for distribution to the Company's various cracker bakeries, where they are folded into boxes used in the packaging of bakery products.

Because operations at the Marseilles, Illinois, plant appeared to be particularly adaptable to palletizing and at the same time posed problems which, if solved, would pave the way for immediate adoption of palletized shipping from the Beacon, N. Y., plant, it was decided to begin our experimental work at Marseilles.

We made an investigation of the dock conditions, floor and elevator capacities, vertical and horizontal clearances at the numerous bakeries operated by the Company, as well as at the carton plant itself. This investigation disclosed that, due to insufficient floor load capacities, some of the bakeries could not use

Excerpts from an address by Harland R. Black, Manager, Materials Handling Division, Traffic Depriment, National Biscuit Company, New York, N. Y.; delivered April 3 before the Packaging Conference of the American Management Association, Auditorium, Atlantic City, N. J., April 1-3, 1952.



Harland R. Black

Mr. Black started work with Nabisco in 1929 and held various positions in the company's sales branches. In 1942, he served as a traveling auditor and four years later, was placed in charge of the warehousing and assembly operations in his company's cracker bakeries. Mr. Black's duties as manager of the materials handling division began in 1950 after he helped to form the section three years earlier.

Right: Pa'letized material is placed into cars (and truck trailers) with motorized pallet trucks.

fork lift trucks . . . . and this eliminated the possibility of double-decking unit loads for shipment at the carton plant.

Simultaneously, a preliminary cost analysis was made for the purpose of determining the potential economic value of palletized shipping. It was evident from this study that the cost of operating any new system would have to be kept at an absolute minimum, if its success was to be assured. This was due largely to the low cost of packaging small bundles of carton blanks and the fact that little or no expense was being incurred for car bracing under the method we proposed to replace. Also, an important decision had to be reached regarding the type of pallet to be adopted — whether it should be of an expendable nature, or of the returnable type. All other factors, however, favored the Pallet Package and mechanized-handling.

#### Many Trial Shipments

After making these initial steps we began experimenting with various types of palletized units and made many trial shipments, both by rail and motor truck. Today, about 70% of the production of the carton plant at Marseilles is being shipped on steel-strapped, single-decked wood pallets to our various bakeries. Truck shipments handle a portion of the output, but by far the greatest per cent of the shipments is in railroad cars. As a result of this new method, a whole series of bundling operations has been discarded for most work, and also, bundle-by-bundle manual handling has largely been eliminated.

During the experimental period of the palletization program, we endeavored to standardize on a few sizes of pallets that would accommodate all material lending itself to palletization, but we soon discovered that carton blanks could not overhang the pallets by so much as a fraction of an inch without being damaged by the steel strapping or from contact with adjacent loads. On the other hand, a pallet substantially larger



than the load was not acceptable since this would permit the stacks of blanks to shift position during shipping, resulting in damaged edges which would decrease the efficiency of the bakeries' automatic folding machines. Consequently, 24 different sizes of pallets are being used and they accommodate 49 different sizes of carton blanks and other packaged items.

#### Reasons For Returnable Pallets

Although many expendable pallets were tried and tested, no suitable one was found for this application, due not only to the high weight of the load, but because of the nature of the material as well. Furthermore, we discovered that the cost of a one-trip pallet would exceed the cost per trip of a returnable pallet plus the round trip freight expense, based on a life expectancy of five trips. Therefore, it was decided to design a special returnable pallet and top brace for the purpose.

Softwood lumber, except for the hardwood strips, is used for constructing both the pallet and top brace, and a minimum amount of material is specified in order to avoid excessive freight expense and original cost. Pallets and top braces are purchased in carload quantities and this. too, minimizes original cost.

Railroad car or truck loading is quickly and easily accomplished by means of motorized pallet trucks, although the hand operated pallet truck proves advantageous when it is necessary or desirable to place two additional pallets in the doorway of the car which is over and above the quantity that can be loaded with the powered hand trucks. Not all trailers and railroad cars are loaded completely with palletized material and, in many cases, after stowing a row of pallets down the center of a truck, the void space on either side of the row of pallets is loaded with miscellaneous supplies either because they do not lend themselves to palletization, or because the volume is too small.

While it is practicable to brace some cars with (Continued on Page 30)

# Package Engineer Reporter

#### Western Packaging Convention Announces Program Details

The Western Packaging and Materials Handling Exposition slated for Shrine Convention Hall in Los Angeles, August 12-14, will be open during the following hours, it has been announced:

The Packaging and Materials Handling Institute, held in Room 133 of Founders Hall, University of Southern California campus, within a few blocks from the Shrine Convention Hall, is scheduled from 8:30 a.m. until 12:00 noon, August 13, and from 8:30 A.M. until 12:00 noon, August 14.

In announcing the Materials Packaging and Handling Institute to be held at the convention, the University of Southern California states:

"The first morning session is aimed at reducing the military packaging difficulties encountered by many, particularly subcontractors and those dealing with the military for the first time. The second morning program has the purpose of helping the many in this area who have handling problems by providing them with specific techniques to use in solving them.

"Many will find further information at the nearby Western Packaging and Materials Handling Exposition being held August 12, 13, and 14.

"Attendance at the Institute is open to anyone with an interest of military packaging and/or materials handling. The registration fee (for the Institute) is \$7.50 for the two mornings or \$4.00 for the one morning only. A company may register once and send one man to the Packaging Session and another to the Handling Session. The printed program with the necessary registration blank will be available at a later date."

Among the leaders of the industry who will speak (Continued on Page 21)

#### N. J. Chap AMHS Elects Officers Holds First Outing

A recent annual meeting of the New Jersey Chapter of the American Material Handling Society, Inc., elected the following officers for 1952-1953: President, J. Wellington Hall, Westinghouse Electric Corporation; Vice-President, Robert H. Daut, Harborside Warehouse Company; Secretary-Treasurer, Bernard J. Kopp, Public Service Electric and Gas Company; Director, Alfred J. Van Benschoten, Raybestos-Manhattan, Inc.

On June 21, the Chapter held its first annual outing at Liberty Corners, New Jersey.

# Short Course Themes Announced For SIPMHE October Convention

Themes for the eight meetings that will comprise the 1952 annual short course of the Society of Industrial Packaging and Materials Handling Engineers were announced recently by Stanley Price of Chicago, Society president, and Robert C. Cragg. Cragg, Chicago regional manager for Gould-National Batteries, Inc., is general chairman of the exposition, exhibition, and short course scheduled for Oct. 13-16 in the Chicago Coliseum. It is the seventh such SIPMHE function.

Registration will take place from 8:30 to 10 a.m. on Monday, Oct. 13. At 10:30, President Price will give a brief address of welcome.



ROBERT C. CRAGG

He will then introduce Dr. William L. Everitt, University of Illinois engineering dean, who will treat "The Engineer's Role in Cost Reduction." Two University of Illinois divisions—the mechanical engineering department of the engineering college, and the extension service—are again cooperating with the SIPMHE in (Continued on Page 33)

#### Functions of Package Design Engineer Discussed By Philly Div.

The Philadelphia Regional Division of the Society of Industrial Packaging Materials Handling Engineers held their regular monthly meeting at the MLA Club in Philadelphia on Monday evening, May 26, 1952.

The principal speaker of the evening was Mr. Joseph (Continued on Page 27)

#### Midget Truck Demonstrates Highway Safety



Left: The "Mighty Mite". Right: Its Big Highway Brother.

The "Mighty Mite", pictured above, spearheads the Highway Safety Educational Unit sponsored by Pacific Intermountain Express. As a public service, the unit is appearing in schools and areas along the P-I-E transcontinental route from California to Illinois and Missouri. Unit purpose is to promote highway safety and create interest in safe driving, primarily with teenage drivers. The midget carries and demonstrates a complete set of professional driver testing equipment and displays pictures of trucking industry safety precautions and practices which can be employed advantageously by private vehicle operators.

The "Mighty Mite" is an exact reproduction of its larger counterpart shown above. Built 6 inches to the foot, as close to scale as humanly possible, it is powered with a Willys Jeep engine, has Timkin dual drive, two transmissions giving it nine forward and three reverse speeds, Westinghouse air brakes, Budd disc wheels, automatic radiator shutters, together with all important accessories necessary for safe highway travel. The tractor was built in the company's Denver shops and later remodeled by Peterbilt Motors, Oakland, California. Brown Industries of Spokane, Washington, constructed the miniature trailer and cargo box.

#### Power Truck With Boom Maintains Plant Lighting

Maintenance goes over with a "boom" at the new plant of Caterpillar Tractor Co. in Joliet, Illinois. A 6,000-pound capacity power electric crane truck equipped with a new type articulated platform is used for faster, easier maintenance of lighting and other

(Continued on Page 32)

#### Parcel Post Shipments Up To 70 Lbs. Eligible For Most PO's

Shippers are needlessly restricting the weight limit on their parcel post packages to 20 and 40 pounds, respectively, without taking into consideration the class of the post office to which they may be directed, it has been pointed out in a letter to SHIPPING MANAGEMENT by B. W. Colegrove, President of G. R. Leonard and Company.

Mr. Colegrove said that except for the relatively few first class post offices, shipments up to 70 pounds and 100" in length and girth combined are still perfectly eligible for parcel post mailing. A shipment may even originate in a first class post office and be consigned to second, third, or fourth class office and be acceptable at the maximum of 70 pounds and 100" in length and girth combined. Mr. Colegrove further stated that if a shipment originates at a second, third and fourth class office, it falls within the ruling that permits the foregoing maximum weight and size.

#### AAR Freight Claim Division Convenes In New York

The 38th and final year of organized loss and damage prevention work under the 60-year-old Freight Claim Division of the Association of American Railroads was observed in June, with a special Prevention Day program during the organization's annual meeting at the Hotel Statler here.

Prevention activities of the A.A.R. are now centered in a new Freight Loss and Damage Prevention Section, recently set up to intensify efforts by the railroads to cut down on damage to freight shipments. The new section is headed by Carl A. Naffziger, of Chicago, who took an active part in the daylong sessions devoted to the discussion of better and safer methods of shipping freight.

Keynoting the sessions was a report on industrywide prevention activities during the past year, which was presented by C. E. Thrasher, of Baltimore, general freight claim agent of the Baltimore & Ohio Railroad.

Mr. Thrasher reported that prevention activities, "being far from strictly a railroad concern," include cooperative work done in the field with shippers and receivers of freight, with product and packaging manufacturers and with the armed forces. Prevention work, he said, is directed at remedying loss hazards occurring at every point of distribution from manufacturer to consumer, including product design, packaging, loading and bracing, handling in transit and pick-up-and-delivery service. Commodities involved cover the entire field of commerce, he said.

Mr. Thrasher declared that prevention work has (Continued on Page 33)



In a recent column we discussed the insurance problems confronting a TM, particularly in its relation to acts of God where a carrier is not liable. In our examples we cited the Kansas City floods, our recent floods and the Arkansas tornado. These so-called perils of nature which devastate certain areas also have a bearing on the TM insofar as routings are concerned, for oftentimes a carrier, because of conditions beyond his control, cannot follow the instructions.

The provisions of the Interstate commerce act make it the express duty of the carriers to comply with the routing instructions of the shippers. The carriers must carry out these instructions unless it is absolutely impossible for them to do so. In the event of this, the carrier must communicate with the shipper before rerouting over a higher rated route. A carrier who does not obtain permission from the consignor is not entitled to the higher charges if they are assessed.

By the same token, initial carriers are guilty of misrouting if shipments are accepted for movement over embargoed routes if the eixstence of the embargo is not called to the attention of the shipper. Conversely, if a carrier refuses a shipment because of an alleged embargo while that embargo was not in existence he is equally guilty.

It should also be pointed out that if a shipper routes his material over the higher rated route, then the carrier will so forward it. If both a rate and a route appear on the bill of lading and they are in conflict with each other, the carrier is obliged to forward via the cheaper method. Similarly, if no routing appears on the B/L, the carrier must forward via cheapest route.



One of the major difficulties encountered in making shipments to servicemen is the time-consuming task of making out the standard customs form 7525-V. However, few people realize it, but the post office has a list of the APO numbers which require this customs declaration. All others may be forwarded without this document. Only 30-40 APO's require this declaration and a shipper may save hours of labor by checking before making shipment. It is our belief, and this is unofficial, that customs requires these statements to prevent blackmarket operations in certain locations.

We would also suggest that all shipments to servicemen go insured if they are at all valuable. While on the subject of parcel post, we would like to answer a question of long standing: naming the proper way to send a C.O.D. shipment insured. This may sound paradoxical, but there are many occasions where a shipper may send a parcel C.O.D. for only a small part of the actual value. Take repair work for example. A \$100.00 watch may be sent in for repair and the cost of this amount to only \$9.00. The C.O.D. to be collected would be \$9.00, yet if

(Continued on Page 31)

#### Two Piece Telescope Container Packages Yarns



Tennessee Eastman's new two piece telescope carton has been found to be the best method of shipping their yarns for easy handling, economical loading, and lower damage to the yarn,

Tennessee Eastman Company of Kingsport, Tenn., packages cones of their Estron acetate yarn in an unusual corrugated container made by the Fibre Board Container Corp. of Martinsville, Va. Fibre Board is a subsidiary of Robert Gair Company, Inc.

A two-piece telescoping container, printed dark blue and white, holds 96 cones of yarn weighing 4 pounds each. Each piece is a half regular slotted container; that is, it has flaps at one end only. The two halves are fitted over a corrugated interior sleeve which has a drop-front opening for easy filling. The unit also in position by means of round holes in the wrapper or corner-cut pads.

Additional interior packing of 24 die-cut wrappers hold 4 cones each of this yarn. To prevent rubbing, which would bruise the yarn, each cone is held firmly ni position by means of round holes in the wrapper into which the cone ends fit.

Tennessee Eastman Company, a division of Eastman Kodak Company, finds this container to be the best method of shipping their yarns for easy handling, economical loading, and lower damage to the yarn.

# NEW PRODUCTS



# & LITERATURE

#### PRESSURE-SENSITIVE TAPE BOOKLET

How seven "Scotch" brand pressuresensitive tapes can be used for various carton sealing and reinforcing tasks is shown in a new 6-page booklet.

The booklet-describing tapes Nos. 250, 280, 320, 710, 720, 880, and 890-is available on request from Minnesota Mining and Manufacturing Co.

It contains 25 photographs of such applications as the taping and reinforcing of heavy fibreboard containers, telescope cartons, and numerous other cartons and boxes for air, rail, and truck shipment. Use of the tapes on manual, semi-automatic, and fully automatic dispensing and sealing equipment is also shown.

The seven tapes described include paper tapes, rayon reinforced paper filament tape, colored and transparent acetate fibre tapes, colored and transparent rayon reinforced plastic filament tapes, and glass reinforced trensparent plastic filament tape. (The latter having a tensile strength of 500 pounds per inch of tape width.)

A table listing the tapes' propertiesall "engineered for carton sealing and reinforcing applications"-describes the thickness, elongation, tensile strength, and adhesion of each.

#### ELECTRIC FOLDING MACHINE

An electric office folding machine, little larger than a typewriter and costing not much more, has been put on the market by Pitney-Bowes, Inc., the postage meter makers. Termed the first true desk-model folding machine, it is designed and priced to eliminate the drudgery and clerical cost of handfolding of paper forms in even the smallest husiness office.

The new office aid can fold with precision up to 5,000 sheets an hour, and is simple enough to be operated by any office worker. It can be "set up" in about one minute for any folding job by means of a simple measuring rule and the adjustment of two indicator knobs. It feeds and stacks from the same end, thereby saving working space and enabling the operator to remain in one position. Sheets are stacked in the hopper and lightly moved by finger to feed rollers where the electric machine takes over and folds automatically.

It can perform two parallel folds in one operation, and can make any one of eight basic types of folds, handling a wide variety of paper sizes and weights. Included are duplicating, bond, ledger, book, coated and uncoated papers in sizes ranging from 3 inches square to 81/2 inches by 14. It is 12 inches wide,

71/4 inches high and 221/4 inches long, including its detachable stacker. The machine is portable and can be conveniently stored when not in use, weighing only 23-3/4 pounds.

The new "Model FH," as it is known is a more compact, low cost version of the heavier-duty "FM" folding machine introduced by Pitney-Bowes two years ago, and adds another product to the company's growing line of mailing and related business machines.



The FH, result of nearly two years' exhaustive research, development and field testing, is now being sold nationally through 93 Pitney-Bowes sales and service offices throughout the United States and Canada with approximately 30-day delivery.

#### NEW MH POWER TRUCK

Versatility is the keynote of a new one-ton materials-handling power truck developed by Consolidated Industries,



Inc. With 21 square feet of loading surface, removable 24 inch stanchions which

Literature and prices of pro-Literature and prices of products mentioned can be obtained if you drop a post card to News Editor, SHIPPING MANAGE-MENT, 425 Fourth Ave., New York 16, N. Y.

Companies having new product stories should send them to the same address.

can be stowed in a rack under the platform, and room on each side of the engine housing for carrying long objects, this truck is suited for a variety of jobs in warehouses, factories, supply depots, docks, railway and truck terminals, and around airports. An adapter for towing hand trucks greatly increases its usefulness

Chain-driven by a 3.10 H.P. Briggs & Stratton engine, equipped with starting crank, its speed range may be varied by a choice of sprocket sizes. Its riding platform, oversize disc brake, foot-operated accelerator, single lever transmission control, and steering wheel with spinner contribute to safe, easy operation. An automatic safety device brings it to an instant stop in case of operator failure, eliminating danger of running out of control.

#### AIR FREIGHT MEMO TARIFF

A new "Air Freight Memorandum Tariff," designed to simplify and localize air freight rates for shippers in 11 major areas on its coast-to-coast and Pacific system, has just been issued by United Air Lines.

Air freight data arranged for easy reference in the 12-page booklet include an alphabetical list of general and specific commodities and rates, minimum charges, rates per pound and optional

pickup and delivery charges.

Booklets covering New York-Newwark, Boston, Philadelphia, Hartford-Springfield, Cleveland, Chicago, Denver. oLs Angeles ,aSn Francisco, Seattle and Portland are available to shippers at all of United's major district sales offices

#### ALUMINUM FOIL SHEET

Reynolds Metals Company has announced government approval of the new four-part sheet, RM-112. This improved packaging material consists of four materials stoutly bonded with special adhesives.

An improved and tougher version of Reynolds RM-101, the new sheet is constructed in the following manner: Scrim backing provides toughness, the plastic film give flexibility, the .001 Reynolds Aluminum Foil means perfect moisture-vapor and water-vapor protection and the viny furnisher perfect seal-

This is the ideal barrier for protecting motors, generators, electronic equipment and other military items packaged by the "Floating Barrier Method" - specification approved as (Continued on Page 19)

# GOVERNMENT PERSONALITIES

## **★ NEWS REVIEW ★**

**ASSOCIATIONS** COMPANIES

#### ARNO L. ZINKE ELECTED PRES. OF MID-STATES GUMMED PAPER CO.

Election of Arno L. Zinke as president of Mid-States Gummed Paper Co. was announced by the firm's board of directors today. He also was named to the board.

As president and director Zinke succeeds the late Irving R. McHenry who died October 2, 1951.

Also elected to the board of directors was Louis F. Weyand, St. Paul, executive vice president and director of Minnesota Mining & Manufacturing Co. Mid-States is a wholly-owned subsidiary

#### NEW VP's AND II DIRECTORS ELECTED AT ANNUAL AMA MEETING

Three new vice presidents and eleven directors were among a slate of twentyfour business executives, representing all segments of American industry, elected to office at the annual business meeting of the American Management



#### WILLIAM CAPLES

Mr. Caples was one of 11 Directors elected to the board of AMA at its recent annual meeting.

Association here this afternoon. The election was held in conjunction with the association's general management conference in session at the Waldorf-Astoria.

Samuel L. H. Burk, director of industrial relations, Pittsburgh Plate Glass Co., Pittsburgh, was elected vice president in charge of the A. M. A. personnel division; K. B. Willett, vice president, Hardware Mutuals, Stevens Point, Wisconsin, vice president in charge of the office management division; and John A. Warren, packaging consultant, American Home Products Corp., New York, vice president in charge of the packaging division. Five other divisional vice presidents were re-elected. All will serve for the 1952-53 year, the twentyninth since the founding of the national management group.

John M. Hancock, partner of Lehman

Brothers will again be chairman of the board of directors; Don G. Mitchell, president of Sylvania Electric Products, Inc., New York, was elected chairman of the executive committee and James L. Madden, second vice presiden of Metropolitan Life Insurance Co., New York, will serve as treasurer. Laurence A. Appley was re-elected president of the association for the fifth year and James O. Rice renamed administrative vice president and secretary. They will guide the group activities of A. M. A. 14-000 members in the fields of marketing, personnel, finance, manufacturing, packaging, insurance and office administration.

#### CUSTOMS COLLECTIONS SET PORT OF HOUSTON RECORD

An all-time record in customs col-lections at the Port of Houston for a single month was established during April when duties paid amounted to \$1,364,703, according to Sam D. W. Low, collector of customs.

The April total exceeded the previous high in July, 1951, by more than \$277,-000, Mr. Low said.

The collector pointed out that the increase in collections could be attributed largely to an increased flow of merchandise. Part of it, he added, was due to higher prices.

Collections for the fiscal year thus far show that the port will surpass those for the previous year. Since July 1, 1951, beginning of the fiscal year, collections total \$10,000,180 as compared with \$6,279,496 for the corresponding period in the past fiscal year.

Steel and steel pipe, crude oil, and burlap were among the major dutiable items handled during the past month.

#### A. H. REDPATH NAMED MGR. TAPE MERCHANDISING FOR 3M's

Promotion of Alan H. Redpath, St. Paul, to the newly-created position of merchandising manager of all Minnesota Mining & Manufacturing Co. tape products has been announced by Louis Weyand, executive vice-president.

Weyand also announced the appointment of R. S. Frommer, also of St. Paul, as manager of the tape group's central sales inventory and production

planning department.

Rednath, a veteran of 21 years service with 3M, had been merchandising manager for cellophane tape and ribbons since 1949. He joined 3M as a clerk in 1931 and moved into the general sales office in 1933. He was named a department head within the tape sales organization in 1940 and assumed charge of cellophane tape merchandising in 1947.

#### McLAURIN-JONES OPENS ULTRA-MODERN PAPER PROCESSING PLANT

McLaurin-Jones Company of Brookfield, Mass., recently opened its new, ultra-modern paper processing plant at Homer, Louisiana. John MacLaurin, president of the firm, officiated at the ribbon-cutting ceremony which was attended by company officers and representatives of the local Chamber of Commerce.

The modern, one-story brick structure, which contains 30,000 square feet of floor space was constructed by con-tractors Fred McVicker and H. C. Mc-Calman. Building was begun in October of 1951. The public was invited to inspect the interior of the plant after the ribbon-cutting ceremony.



Top photo: Modern, one-story brick structure houses the new Homer (La.) Division of McLaurin-Jones Company. Brookfield, Mass. The building contains

30,000 square feet of floor space. Lower Photo: John MacLaurin, president of McLaurin-Jones. cuts ribbon opening new plant in Homer. La. John d. MacLaurin (center) General Plant Manager and Peter MacLaurin. (left). Plant Manager of the parent firm in Scotland, look on.

The new Homer, Louisiana mill, which will be the firm's primary southern producer of Ordnance Wrap and Polyethylene coated paper, will also manufacture a complete line of gummed sealing tapes. Construction of the plant allows for installation of equipment to produce both flat and gummed coated papers.

The machinery has been set up in the plant to give a straight flow operation in all paper processing. This assures ideal physical conditions for the manufacture of laminated and coated papers, plant engineers point out. A private railroad spur and truck-level loading docks have also been installed to facilitate the uninterrupted flow of finished products to both truck and rail terminals.

Executives from McLaurin-Jones revealed the town of Homer was chosen as the site for the plant because of its central location with reference to the territory to be served. Proximity of raw material sources also played an important role in the selection of the town of Homer. By being close to the source of raw material supply, the firm will eliminate long-haul freight charges. This enables McLaurin-Jones to offer higher quality products and speedier delivery

at minimum cost.

The opening of the Homer mill gives McLaurin-Jones four plants, all strategically located to serve the major sales outlets of the nation—the northeastern seaboard area is served by the Ware and Brookfield plants in Massachusetts; the north central area by the mill in Grand Rapids, Michigan and the entire south will be served by the new Homer mill. The firm feels the four plants, by being centrally located in major sales areas, enables McLaurin-Jones to give customers a real plus in service.

#### KATY ELECTS THREE NEW DIRECTORS

Three new directors were elected, and six incumbent directors re-elected to the board of the Missouri-Kansas-Texas Railroad Company at the annual meeting of stockholders held in St. Louis.

"An amendment of the Articles of Association of the company was adopted," Mr. Morfa stated, "increasing the number of directors from 18 to 21." He pointed out that "this will permit the election of directors from a greater number of communities served by the company, and further diversifying such representation among Southwestern busi-

ness and industry.'

The three new directors elected were Messrs. Kenneth A. Spencer, President, Spencer Chemical Company and Pittsburg and Midway Coal Mining Company, Kansas City, Mo., for a term of three years; Frank M. Porter, President, Fain-Porter Drilling Company, Oklahoma City, Okla., for a term of two years; and William L. Kistler, Jr., President of W. L. Kistler, Inc., Tulsa, Okla., for a term of one year.

The six incumbent directors re-elected, each for a term of three years, were: Donald V. Fraser, President of the Company; Kenneth J. Hanau, Executive Vice-President, Wagner Baking Corporation, Newark, New Jersey; Sidney Maestre, Chairman of the Board, Mercantile Trust Company, St. Louis, Mo.; William J. Morris, Chairman of the Board, Continental Supply Company, Dallas, Tex.; William M. Thornton, Vice-President & General Manager, Longhorn Portland Cement Company, San Antonio, Tex.; and William K. Warren, President, Warren Petroleum Corporation, Tulsa, Okla.

#### N.C. CITY HONORS CHASE BAG CO. FOR AID IN ITS PROGRESS

As a means of expressing its appreciation to Chase Bag Company for the firm's contributions toward the growth and progress of Reidsville, North Carolina, the city's Chamber of Commerce sponsored a banquet recently at which Mr. F. H. Ludington, Chase President, and key personnel of the Chase Reidsville branch were guests of honor.

In a brief talk acknowledging the

honor, Mr. Ludington emphasized the important part that bags play in our nation's economy during periods of both war and peace. He mentioned also the fact that hardly any item or commodity important in every day life could be named that did not at one time require the services of a bag. In citing statistics envolving the Textile Bag Industry's use of Southern Cotton Mills' cloth, Mr. Ludington pointed out that the amount of yardage used annually was more than enough to circle the globe a dozen times.

#### **New Products**

(Contnued from Page 17)

Type II material under AN-B-20, Barrier, Flexible Sheet Moisture Vapor plus Exhibit 618 and Class A, Type I material under MIL-B-131A, Barrier-Material; Water-Vapor Proof, Flexible.

Upon request, free samples are available to manufacturers and converters for preparing their qualification samples. This applies not only to RM-112, but to other Reynolds Military Barrier materials: RM-240, approved under JAN-117, type II (replacing AR-61); RM-260, approved under JAN-117, type I (replacing AR-63); RM-201, currently being used for dehydrated soap packages in rations.

Call the Reynolds Office listed under "Aluminum" in your clasified telephone directory.

#### CARTON CLAMP FOR FORK TRUCKS

A new carton clamp enabling efficient low-cost unpalletized handling of a wide variety of different size cartons, is available from The Yale & Towne Manufacturing Company.



The clamp arms are articulated to equalize pressure on the cartons being lifted. An adjustable regulator on the hydraulic system permits clamping pressure adjustment over a wide range, as determined by the weight of the cartons being handled. This regulator also prevents crushing of the cartons by limiting clamping pressure.

In one application, one, two, four, six, or eight television sets in cartons can be handled at a time in an appliance warehouse. These cartons are stacked four high without the use of pallets or racks.

#### POWERFUL STAPLER

A new, deluxe model stapling machine is being added to its line of staplers by Bostitch, Inc. The new Bostitch B-11 stapler is a powerful and versatile four-way stapling tool. A



tacker, stapling plier, desk stapler and staple remover—it is really four machines in one.

Built to give years of trouble-free service, this latest Bostitch model has a new type floating driver for powerful and jam-free action, making it easy to fasten at least 32 sheets of ordinary bond paper.

The B-11 makes an ideal stapling tacker, too. It's closed in front and gives full support to the staple while it is

being driven.

A window on the side of the machine warns the user when the staple supply is low. A flip of the sturdy lock on top opens the machine for quick and easy loading. And an attached remover blade, a Bostitch exclusive, whisks the staples out with a gentle push. It's one staple remover which can't be lost since it's actually part of the stapling machine.

#### BROCHURE ON CORRUGATEDS

Gabriel Box & Carton Co., manufacturers of corrugated cartons and distributors of a complete line of shipping room supplies, has just issued an attractivelly printed ,two-color brochure. According to John A. Gabriel, owner and general manager, the six-page brochure is designed to give busy executives an at-the-desk trip through its 30,000 square foot Los Angeles plant and to illustrate basic designs of corrugated shipping containers.

The front cover is composed of a drawing of the modern plant and a map showing its location. The next three pages are devoted to the interior of the factory. Illustrations and text reveal how huge rolls of raw Kraft paper, direct from the paper mills, are processed though modern machines such as corrugator - combiners, printer - slotters, power stitchers, automatic tapers, etc., producing each month over 500 tons of high quality "A" and "B" flute corrugated shipping containers. Photographs also show the efficient shipping and receiving department where fork-lifts and late-model trucks are used to expedite shipments, its modern offices where fast service and courtesy are practiced, and the personnel and functions of other departments.

On the other pages and the back (Continued on Page 23)

#### Railroad Losses Go Down

(Continued from Page 19)

methods, and materials for packaging and securement. Information about acceptable and proven practices should be distributed to all members in the industry, as well as to others.

For over 10 years, the steel industry through the American Iron and Steel Institute, has had a representative committee to deal with just such matters.

The producer surely wants his shipments to be delivered to his customer in perfect condition and equal to, if not better, than those from his competitors. Therefore, the article must be properly placed in the package. The package itself is most important because it must carry the load, withstand numerous handlings, and be a credit to the producer when it reaches the consignee.

#### Good Packaging Pays

No producer should consider his responsibility finished until the article he made is received by the consignee in a satisfactory condition. To do this, he must ever be alert to improvement in methods and materials, the transportability of the package, its size, kind, material from which it is made, and its success or failure in doing the job for which it was intended.

There seems to be little doubt but that the shipper

who uses a cheap, inadequate package is making a substantial contribution to the economic waste of loss and damage.

The consignee also has a vital interest in loss and damage prevention. More often, he is the owner of the goods and is obliged to bear the burden of preparing a claim which, when paid, only reimburses him for the amount of direct loss as indicated by the invoice value. He receives no compensation for interrupted schedules, lost sales, lost working time and several other items, including the cost of filing the claim. It is, therefore, to his interest to render all possible assistance to the shipper and the carrier.

#### Responsibility of Carriers

In spite of everything we say about the things the producer or shipper can do, or the things that the consignee or consumer can do to eliminate losses and damages to materials while in transportation, it nevertheless is the primary responsibility of the carriers. It is their job to move materials to their ultimate destination on time, without damage, and without loss. One of the most frequent causes of damage today is the result of rough handling, at least in carload traffic. Switching the coupling at speeds in excess of 4 miles per hour is the greatest contributor to these losses, and also to undue wear and tear on sorely needed expensive railroad equipment. It is much better to "walk 'em together at 4 miles than to slam 'em together at 6 miles." Despite all that has been said



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and written about this during the past years, we continue to suffer from it.

Ordinarily, carloads are loaded, secured, and braced by the shippers, not inspected by the carrier, and that is as it should be. But, if the lading shows damage on arrival of the car at destination, then problems and costs really multiply. It is customary to call upon the delivery line to inspect and report. It seems to be Number One Rule in their training to never admit railroad responsibility.

While the L.C.L. freight on the railroads is only about 2% of the total movement, it is unfortunately responsible for about 20% of the loss and damage costs. Such shipments are handled and transferred several times in transit so the adequacy of the container; the marking; the securement, internal and external size and weight, are important. The method and ability to handle property is alone the responsibility of the carrier. To an unknown extent, some of these losses and damages to L.C.L. freight are the result of acceptance from the consigner of insecure and improperly marked shipments, improper handling and stowage, carelessness, and lack of supervision of workmen.

We must stop buck-passing, excusing our own failures, or displaying a complacent attitude on our individual responsibilities. There must be created a better and more comprehensive plan of assembly and distribution of vital facts so that producers, carriers, and receivers will have a better working knowledge of each other's problems and capabilities. I think that the carriers should lead off in such an undertaking, but certainly, the users of transportation have a well defined part to play.

-Courtesy AAR

#### Western Package Convention

(Continued from Page 14)

at the Institute is Charles A. Bogenrief, head of Industrial Engineering at Grayson Controls Division, Robertshaw-Fulton Controls Company. Bogenrief will speak at the August 14th session on "establishing work standards on materials handling by ratio-delay." He will illustrate the use of "occurrence" type studies to estimate the number of materials handlers required in a plant. This method will be explained as the standard procedure for determining materials handling man hours necessary to service a production department in industry.

#### IN OUR AUGUST ISSUE:

General Motors' Pioneering Work With Volatile Corrosion Inhibitors

Watch for It.



Here is the ideal protective packing. Made of cotton wadding, Pad-Pak has resilience to absorb impact... to protect against scratches and rub marks. Glazed outer surface gives extra body, greater ease in handling, and permits accurate cutting to any shape.

But safeguarding cabinets in shipment is only the beginning of a long list of Pad-Pak uses. Any item subject to breakage or marring—from perfume bottles to polished metal parts — reaches its destination undamaged when cushioned with this extra soft, resilient material.

Ask for samples of Pad-Pak, stating your choice of thickness — from 1/4 to 1/2 inch. Write Dept. S-7

IMMEDIATE DELIVERY



#### TRAFFIC REPORTER

"Is your wife a shoplifter?" was the topic, at an unusual luncheon session of the Los Angeles Transportation Club. Inc., in June. Meanwhile a golf, barbeque, stag party was planned for July 25th at the Fox Hills Golf Club.

The Wisconsin Traffic Club recently issued an amusing invitation in the form of a freight tariff, for an outing held at Rhinelander, Wisconsin, June 25, 1952. The three page folder looked like an official form, with Section 1, Rules and Regulations devoted to "dangerous articles" like martinis, high balls and the like, and the entire program carried through in the same motif. Section II was headed "This Section Contains Commodity Rates," and told the cost of various luncheons, dinners and other aspects of the program.

Father, Son and Daughter Night was held at the Hotel Commodore in June by the Metropolitan Traffic Association of New York, Inc.

Annual Outing of the Empire State Highway Transportation Association, Inc., was held on Thursday, June 19, 1952, at the Travers Island Clubhouse of the New York Athletic Club. The all-day affair, from 10 A.M. to Midnight, incuded a buffet luncheon and a complete shore dinner.

Pacific Traffic Association of San Francisco announced Sports Night, to be held August 12, 1952.

The regular dinner meeting of the Women's Traffic Club of New York, Inc., was held at the Park Sheraton Hotel on Tuesday, June 10th at 7:00 p.m. This occasion marked the 21st Anniversary of the Club which was organized in 1931 with 51 women as charter members. The present membership is 225.

At the May meeting Miss Mary E. Clarke of Phileo International Corporation, Long Island City, N. Y., announced that Miss Lillian H. Boylan of the Union Pacific Railroad Company, 626 5th Avenue, New York, N. Y. had been unanimously elected the new President of the Women's Traffic Club of New York, Inc., for the year 1952-53. The other officials who were elected to officie with Miss Boylan are:

Ist Vice President and Chairman of Program Committee: Mrs. Margaret Brittan. The Baker Castor Oil Company 2nd Vice President and Chairman of Membership Committee: Miss Judith Schmidt, Pacific Mills Recording Secretary: Miss Lillian . Crow, Pennsylvania

Railroad

Corresponding Secretary:

Miss Jean Walker, Asiatic Petroleum
Corp.

Treasurer:

Mrs. Mabel Otterson, Connuell Bros. Co., Ltd.

Miss Frances A. Waehler, P. W. Dodge Corporation

Miss Mary Kazmac Grece, Inc. Inc.

Miss Lillian H. Boylan was born and educated in New York and is the secretary to the Eastern Traffic Manager, Union Pacific Railroad Company. Her entire career has been invested in this company, having held various positions in the Passenger and Freight Traffic Departments.

Miss Boylan has served on many committees. In 1951 she was elected 1st Vice-President and Chairman of the Program Committee.

The 37th Annual Outing of the Worcester Traffic Association will be held Monday, July 21st, 1952 at the Wachusett Country Club.

Pacific Traffic Association will meet Jointly with the Women's Traffic Club on June 10th for their annual Aviation Night. President Stephen J. Meyer expects a capacity attendance of some four hundred members and aviation representatives which emphasize the increasing importance of the aviation industry.

An Hawaiian theme was featured with the dinner meeting held at the Hawaiian Club, 25 Mason Street at Market. Members enjoyed an authentic full course luau dinner complete with kalua pig, lomi, chicken luau, pipi gaula, haupia, poi and fresh fruits.

The recent annual meeting of the Forwarding Agents and Foreign Freight Brokers Association of New Orleans was held in the form of a luncheon at the International House. Following the luncheon, some subjects of local as well as national interest were discussed, after which an election of officers took place. In this election, J. W. Allen was named President; P. B. Lusk, Vice President; George Renaudin, Treasurer; L. D. Richeson, Director; W. O. Westfeldt, Director; and E. Baxter, Secretary.

The Alumni Association of T. M. I. held its final meeting of the season on

June 19th 1952, in N. Y. C.

Guest speaker was Mr. John F. Budd of the American Export and Import Bulletin of New York his topic was "Air Cargo."

Lewis E. Yost, assistant general traffic manager for The Sherwin-Williams Company, was elected president of the Traffic Club of Cieveland on June 19. He has been a member of the traffic group since 1936, and served as first vice president during the past year.



LEWIS E. YOST

Yost joined Sherwin-Williams March 7, 1927 as a rate clerk following employment in the Cleveland freight office of the Pennsylvania Railroad. Later he became head of the paint company's rate department. From 1941 to 1945 he was in charge of traffic and transportation for the Illinois Ordnance Plant at Carbondale, Illinois, a shell-loading plant operated by Sherwin-Williams for the government. Upon his return to Cleveland he was named to the assistant general traffic manager post.

Chairman of the National Paint, Varnish and Lacquer Association's traffic committee, Yost is also a member of the Cleveland Motor Transportation Advisory Committee, a group that works with local officials to improve transport traffic within the city.

In recognition of their active cooperation for over a quarter of a century in the furtherence of progress of United States import trade, Harper, Robinson & Co., 510 Battery Street, San Francisco, California, Customs Brokers and Freight Forwarders, were recently awarded a Twenty-five Year Membership Certificate in the National Council of American Importers Inc., New York, New York, Harper, Robinson & Co. is one of the few West Coast firms receiving this award. The citation reads "In recognition of active cooperation and participation for more than a quarter century in the effects of our organization to further the progress and development of United States Import Trade."

Traffic Clubs and related associations are invited to send news and bulletins to this column. Deadlines: the 10th of the month, for the following month.

#### **New Products**

(Contnued from Page 19)

cover are shown some of the shipping room supplies distributed by Grabiel, including gummed tape, tape dispensers, pre-cautionary labels, packing materials such as shredded paper, wood excelsior, etc. Pictured also are John A .Gabriel two employees in front of the original building where the business was started in 1939.

#### NEW KIT FOR POWER SAW

The new RCS Super Saw Kits are housed in a re-designed metal carrying case, include a complete assortment of saw blades, a tube of lubricant, a choice of three different types of heavy-duty

drills plus necessary Allen wrenches.

The new Model T Super Saw, which is supplied with all new Kit assortments, has a saw stroke of 3/4", is cooled by built-in blower, accomodates blades for sawing almost all types of materials and needs no starting hole. A new display panel, which in conjunction with Kit itself forms an attractive merchandise counter-display, is also available without charge to distributors upon request.

#### SCALE CATALOG

A new twenty-eight page Condensed Scale Catalog Number 11 has just been released by The Howe Scale Company.

A compact edition of Howe's complete catalog of 200 pages, the new Condensed Scale Catalog includes complete specifications, spot illustrations, and essential information.

A simple index makes it easy to find any scale. The Condensed Scale Catalog is conveniently arranged by types of weight indication.

#### FORK TRUCK FOR ROUGH GROUND

The Tracto-Lift, a heavy duty machine that fills a long recognized need for a rough and ready fork lift that can operate on rough or sandy ground, is the perfect answer to the problem of ' outside storage, according to E. C. Jones, the manufacturer.

Combining the "Go anywhere" of a tractor with the lifting power of a fork truck, the Tracto-Lift provides a speedy and efficient method of storing concrete products, construction and building material. It will even move material over soft or cultivated fields; for instance, in citrus groves, or on building sites of new construction where ground conditions will usually not permit the use of fork trucks.

By utilizing the heavy duty industrial (Continued on Page 25)

Literature and prices of pro ducts mentioned can be obtained if you drop a post card to News Editor, SHIPPING MANAGE-MENT, 425 Fourth Ave., New York 16, N. Y.

Companies having new product stories should send them to the same address.

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#### Greater Safety On RR's Made Possible By Outlay

How greater safety on the nation's railroads has resulted from the outlay of billions of dollars by railroads in their quest for a better plant and increased operating efficiency was described by W. F. Gleeson, of New York City, vice president and general counsel of the Lehigh Valley Railroad.

Speaking before the annual meeting of the Safety Section of the Association of American Railroads at the Hotel Statler, Mr. Gleeson said that railroad installation of heavier rail and bridges and deeper ballast has made for safer track and that stronger and better cars have created greater protection for passengers. Improved signal systems, together with almost all other plant improvements, he added, have contributed immeasurably to the overall safety of rail transportation as well as to efficiency.

#### Speed Record Amount

Mr. Gleeson pointed out that the railroads last year spent a record amount of money—almost one and one-half billion dollars—to improve their plant. He said that while it would be difficult to ascertain just what part of this huge sum could be allocated as definitely for safety purposes, the Interstate Commerce Commission once estimated that 29 per cent of total rail-

road spending for additions and betterments could be directly attributed to safety improvements.

As an example of how better physical facilities promote safety, the railroad officer cited the high employee accident record of the last century that accompanied use of the old link-and-pin coupler on cars. Its replacement through the development of the automatic coupler, which does not require men to go between cars during coupling operations, alone marked "a tremendous advance along the lines of safety," he said.

Mr. Gleeson also called attention to railroad improvements which have promoted public safety generally, such as better grade crossing signals. He said that the Lehigh Valley itself in recent years has installed a total of 27 automatic crossing gates at an average cost of \$19,000 each, and 31 sets of flasher signals averaging \$8,000 per set.

Safety promotion efforts on the part of railroad management have not stopped at the mere observance of the requirements of safety laws, Mr. Gleeson declared. The railroads, he said, maintain strict conformance with, or surpass, the high standards of safety set up by such federal legislation as the Safety Appliance Acts, the Hours of Service Law and the Boilet Inspection Act—which he described as covering every part of a locomotive "from the reflection of the headlight to the echo of the whistle."



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#### **New Products**

(Continued from Page 23)

tractor with the large tires to give maximum flotation and tractive effort, and applying this principle to conventional fork truck efficiency, a unit has been built with ability to "go anywhere and do anything." This is made possible by the large super traction tires on the front of the Tracto-Lift.

The tires are switched from original installation to give maximum traction in the opposite direction. The other modifications are the reversing of the transmission, tractor seat, steering mechanism, improvement of standard steering and the adding of counter-weights on the rear to give maximum stability in handling heavy loads. As the load weight is increased the steering ease increases.

#### ROLLER GRAVITY CONVEYOR CATALOG

Lamson Corporation, has developed a new catalog which presents a full line of roller gravity conveyors with complete information on proper selection.



The 28-page, two-color booklet contains size and specification data on gravity conveyors along with detailed construction characteristics. Different installations require different sizes and types of rollers and the booklet explains how to determine which roller will be most suited to any particuar application.

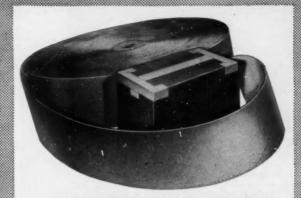
Accessories are illustrated and described so that a complete gravity conveyor system can be planned. These accessories make possible changes in direction, coordination of several lines, and combination of gravity conveyors with live roll conveyors.

A number of applications of Lamson roller gravity conveyors are illustrated to show the diversity of jobs that can be performed with this equipment. These photos show what can be done with roller conveyors to solve basic materials handling problems.

#### POWER-DRIVEN STRAPPING MACHINE

Acme Steel Company is presently tooling up to produce its new power-driven strapping machine. This machine, designed to speed high-volume flat steel strapping operations and reduce operator fatigue, produces strap joints by spot welding.

Featuring a streamlined, color-coordinated housing for integration into



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Finally, gummed tape is the only closure that so completely seals your carton. Cracks and crevices are eliminated. Smoke, dust, or vermin can't penetrate. You can be sure your merchandise arrives in the same spotless condition you packed it.



Haeger—world's largest art pottery—is another blue ribbon company that pre-

#### Haeger Potteries cut shipping damage with Blue Ribbon

Says Hasgar "Blue Ribbon Tape ensures that our products reach customers in the same high quality condition as when they leave the factory. Blue Ribbon's tremendous strength and permanent adhesion have paid us enormous dividends, because damages have been virtually eliminated."



standard-type conveyor lines, the Acme Steel strapping machine produces welded joints with strengths approaching the tensile strength of the size of strapping used. The machine can accomodate many different package sizes. Also there is no limit to the amount of strap that can be fed or the amount of slack that can be taken up.

The machine's 31-in:h table height permits it to be installed in standardheight conveyor systems. Considering overall dimensions, the machine is 43-5/8 inches wide by 45 inches deep by 47 inches high. It weighe 1350 pounds.

In operation, packages approach the machine on a roller conveyor from the right. After strapping, they leave the machine from the left. Roller sections in the table top of the strapping machine facilitate location of packages over the tensioning and welding unit, elimintaing the necessity for manual lifting. Fourteen ball-transfer rollers, built into the table top around the strapping mechanism, or to be turned for cross strapping with a minimum of effort.

When a package is centered over the strapping mechanism, the operator simultaneously feeds out the required length of strap by deflecting the strapfeed pedal with his foot while guiding the strap around the package and into the V-shaped guide slot in the table top with his right hand. His left hand is used to hold the package in place against the back guide. The guide slot in the table top automatically centers and

locates the entering strap.

When the strap is around the package, the operator actuates the cycle bar under the control panel with his right hand. This causes the strap to be tightened around the package to a predetermined tension, cut from the coil, and then joined by welding. The entire operation is completed in a matter of seconds.



The design of the machine assures full safety to the operator. Tensioning or welding is not possible while the operator is feeding the strap because he must first release his right hand from the strap before he can use it to actuate the cycle bar. .

All operations formerly requiring physical effort are now done by the machine. Also, skilled labor is not necessary for operation. Women workers can easily strap packages at high volumes and to uniform strap tensions without fatigue.

Literature and prices of products mentioned can be obtained if you drop a post card to News Editor, SHIPPING MANAGE-MENT, 425 Fourth Ave., New York 16, N. Y.

Companies having new product stories should send them to the same address,

#### Packing A Punch

(Continued from Page 7)

Donald W. Nyrop, chairman of the Civil Aeronautics Board, said recently, it is reported by Export Trade & Shipper.

Pointing out that geographical considerations are no longer a barrier in air transportation, Mr. Nyrop stated that only the limitations of economics and national boundaries prettent such services from being common at the present time. But the trend to carry products by air from their point of manufacture to the point of delivery is becoming more and more pronounced, he added.

C.A.B. has already designated such inland cities as Chicago, Houston and Detroit as points of entry to Europe or South America, and others will probably be added in the near future, he went on.

There is no reason why an air-cargo route could not operate directly from St. Louis to London or Calcutta if it is economically profitable and internationally feasible, Mr. Nyrop said. As air trade increases, many in and cites of the United States "will undoubtedly" be designated by the board as airports of entry.





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#### Philly Div. Hears Talk

(Continued from Page 14)

L. Krager, Packaging Design Unit, Engineering Products Division, Radio Corporation of America, who discussed the topic "Functions of a Packaging Design Engineer.

Mr. Krager outlined the organization and procedures used at RCA to provide an adequately designed package for each finished product that is manufactured by the company. It was most interesting to the group to discover the degree to which standardization can be carried, and is being carried, at RCA to reduce the cost of packaging.

The group's extreme interest in Mr. Krager's talk was evidenced by the number of questions directed to the speaker at the conclusion of his formal remarks.

#### Cover of the Month

(Continued from Page 10)

standard conditions for using test instruments. The instru-ments used in the conditioning room include the flat crush tester, ring stiffness tester, Mullen tester, balances, calipers, Elmendori tearing tester and many more delicate instruments, all of which are used under these ideal temperature and moisture conditions to prevent variations in strength properties.

#### Independent Testing Labs

(Continued from Page 11)

are planned, executed and interpreted by trained, experienced engineers accurate data can be obtained economically and quickly.

"Under controlled laboratory conditions checks may be maintained regularly on sources of supply. Such testing is preventive rather than curative and has real dollars-and-cents value. Waiting for complaints by the carrier or consumer is the most expensive and least satisfactory method of discovering packaging faults.

"Tests can be used to evaluate proposed changes in types or styles of containers or in the materials used. so that the proposals can be accepted or rejected confidently.

"There are times when a new package promises increased protection or satisfactory performance at considerably reduced cost but may violate the rules of the common carriers. Applications for modification of freight classification or other regulations are much more effective when backed by the results of laboratory tests."

Other aspects of package testing laboratory work which may be performed include Packaging Research, Consultation, and Freight Car Inspection. Of Package Research aspects the booklet "How Good Is Your Package?" states;

Research projects often are originated to find specific answers to problems such as:





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# MANAGEMENT

by Richard C. Colton General Traffic Manager, RCA Victor Division, Radio Corpora-tion of America

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"Evaluation of the cushioning effects of various kinds of corrugations and material com-

The comparative protective characteristics of various grades of corrugated boards when used to pack a product.

The most practical and economical material to use for a specific commodity, taking into consideration water vapor transfer rates, cost, consumer convenience, plant operations, merchandising requirements, channels of distribution and other package functions."

On Freight Car Inspection:

"This service consists of detailed examination of specific carloads of merchandise at point of destination. Reports based on precise analysis of damaged packages and containers supported by photographs of the car at various stages, make possible corrective shipping and loading measures where necessity for improvement is indicated."

Every conceivable type of package testing instrument is used by the best-equipped independent laboratories, many of them having been evolved, revised and improved by engineers of the laboratories themselves. The most frequently used tests are by now familiar to shipping and packing managers and traffic executives. They include:

Bursting Test (with the familiar Mullen Tester).

Revolving Drum Test

Puncture Test (Beach or General Electric Puncture

Compression Test

Incline Impact Test

Cushioning Test (General Electric Cushioning Meter or "G-meter")

Vibration Test

Basis Weight Determination

Tensile Test

Greaseproofness Test

Tear Test (Emendorf Tearing Tester)

Ride Recorders

Drop Test

Ring Stiffness Test

Score Line Tear Test

Scuffing Test

Flat Crush Test

Caliper Determination

Weatherproofness Test

Moistureproofness Test

Many of the above tests are large floor tests for containers while some are table tests for fibreboard and corrugated container material itself. A well-equipped laboratory will have all of these plus some others as well-but, although it has been estimated that a modest laboratory can be equipped for perhaps \$30,000, what really counts is the experience and know-how of the personnel, rather than the availability of the equipPictures accompanying this article and the caption to the cover photograph tell something of what a leading testing laboratory can do. Actually no article, or photographic essay, however complete, could cover this vast subject thoroughly. Only a visit to a package testing laboratory, with the explanations and demonstrations of an informed guide can give a real idea of the genuinely objective scientific work which is being carried out in the field of package testing today.

#### Trailer Trains Simplify Material Handling Tasks

The new Chicopee, Mass. warehouse of A. G. Spalding & Bros. easily handles more than one million pounds of sporting goods each month because of a modernized material handling system involving the use of in-plant trailer trains, fork trucks and platform trucks. This new system permits handling of incoming and outgoing shipments with a 15 to 20 per cent saving over previous handling costs.



Tractor-trailer trains haul both raw materials and finished products between various areas of the A. G. Spalding & Bros. new Chicopee, Mass. warehouse.

Prior to construction of the new warehouse, storage for raw materials as well as finished products was scattered over the 12-acre plant area. Repetitive handling operations often were necessary to transfer raw materials from shipping-and-receiving, to warehouse, and then to manufacturing areas. Decentralization required that finished products be hauled from the manufacturing area back to the shipping-and-receiving area in a separate operation.

The 130,000-sq. ft. warehouse was built in a location convenient to the various manufacturing divisions. The warehouse contains both shipping and receiving departments as well as raw material storage. Materials are hauled between areas with tractor and trailer train. Flow of goods, in and out of the warehouse is such that the in-plant trailer trains can move raw materials from receiving or storage directly to the manufacturing area. On the return trip, finished goods are hauled

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to the storage or shipping area. Further efficiency of material flow is obtained through the use of collapsible pallet racks.

All incoming raw materials are palletized before removal from the delivering carrier. These racks are compact and mobile, thus guaranteeing a constant supply of pallets wherever and whenever needed.

The combination of lift trucks and tractor-trailer trains in the storage and shipping operations permits the handling of finished goods in large unit-loads. This bulk-handling method cuts, not only handling time, but inventory time as well.

All materials are received and shipped at the same dock. The doors for each department, however, are located at opposite ends of the dock. This arrangement directs the flow of materials in, on one side of the building to raw material storage and manufacturing, and out on the other side of the building from manufacturing to finished products storage or shipping.

-Photo a Data Courteey Mercury Manufacturing Co.

#### The Pallet As A Package

(Continued from Page 13)

bundle stock, so to speak, actually most cars containing palletized packages are braced with wood bulkheads held in position by steel bands. These bulkheads are fabricated at the carton plant and approximately 75% of the lumber used in their construction is salvaged by bakeries and re-used for bracing shipments of bakery products. This represents a definite cost advantage. To minimize car bracing costs, bulkheading lumber is purchased in carload quantities, and is cut to exact dimensions required in our operation.

Upon receipt of a shipment at a bakery, the palletized packages are removed from the truck trailer or railroad car by the same type of equipment that was used at the carton plant to load them. Specially designed magnesium dockboards are used to bridge the gaps between motor truck and box car floors, and to compensate for height differentials in the docks and the vehicle. Properly designed dockboards are of paramount importance when using motorized hand-pallet trucks due to the low underclearance of such trucks.

In conclusion, it seems appropriate to mention that, although the art of proper packaging is entirely distinct from materials handling, it has, nevertheless, in recent years become closely allied with it due to the rapid advancement of handling methods. Better packaging will promote better handling and, conversely, better handling will promote better packaging. In our Company, the Materials Handling Division works very closely with the packaging divisions of our Production nda Purchasing Departments in a constant effort to lower costs through adoption of better methods. As a result of the rising wage-price spiral we must not only continue such efforts, but we must itensify the search for more efficient methods and increase the use of labor-saving equipment.

#### Revolutionary Type Electric Locomotive

A new and revolutionary type of electric locomotive—known as an ignitron rectifier engine—recently hauled a train of 162 fully loaded coal cars in a test run which attracted wide attention in railway and engineering circles. Two of these ignitron rectifier locomotives, after being put through extensive road tests, have been assigned to heavy freight duty on an Eastern railroad.

A major difference between this type of locomotive and standard type electric locomotives is in its use of rectifier tubes to convert alternating current from overhead trolley lines to direct current for driving the motors. While alternating current is easier and cheaper to transmit than direct current, the d.c. driving motors have operation and cost advantages. The ignition rectifier locomotive combines the advantages of both systems.

Sponsors of the ignition rectifier locomotive say it is economical to operate, has a continual and unlimited source of power, is easy and relatively inexpensive to maintain, is easier starting, smoother riding, powerful at slow speeds, fast enough for any requirement.

The 6,000-horsepower 2-unit locomotive is 124 feet long on six motored axes. It weighs 740,900 pounds and has a tractive power of 189,000 pounds.

#### "Listen Mr. Traffic Manager"

(Continued from Page 16)

parcel is lost the amount of total loss would be \$100.00. The proper way to do this is to make the C.O.D. fee large enough to cover full loss, and if possible indicate the actual value on the write-up sheet. In this way if loss or damage occurs, full coverage is assured.

Another nuisance item which keeps coming up is the matter of transportation tax (3%) on shipments to government agencies. The rule, as we interpret it, is that shipments to a Government agency, armed forces, etc., are prepaid by the sender but are not taxed the regular 3%. There is considerable misunderstanding among carriers themselves as to how this tax should be applied. In an attempt to clear up this misunderstanding we contacted many of them, including transportation associations, and find that, in general, the rule which we stated applies. However, the administration of the rule differs slightly. Most trucking concerns do not bill the 3% tax if the addressee or consignee is obviously a Government agency.

Some agencies, however, require that the tax exemption certificate either be given to the carrier when shipment is picked up or be sent to the carrier's billing office by mail. It would be advisable to check with Railway Express and all other carriers to determine their policy before making shipment. We have also found that on shipments to government agencies which are prepaid and sent via Railway Express that it is







WRITE FOR FACTS War contracts for shells, fuses and certain other materials must be packed in wire stitched containers because this type of seel is not affected by moisture. The IDEAL Combination Stitcher wire seals tops of packed containers as well as bottoms of empty containers and is quickly convertible from one operation to the other.

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himself and place them on the Express receipts. The consignor, in the event of a prepay and bill shipment to the government, must submit a copy of the freight bill to substantiate the charges. Very often the invoice is made out and charges inserted on it. However, when the express bill is rendered it differs from that of the shipper. This involves a long, drawn out correspondence and is typical of government transactions.

advisable for the consignor to determine the charges

Many strange things enter into an efficient shipping operation. For the most part this efficiency is gained through methods and systems, both mechanical and through paper work simplification. However, as many concerns now realize, shipping efficiency may be increased greatly through the feet. This may sound unreasonable and somewhat ludicrous but, in effect, it is true. Efficiency experts have found that men standing on cement or wood floors for extended periods of time tend to tire very easily. On the other hand, if these floors are covered with some such material as linoleum they do not tire nearly as fast, hence increasing the daily output. We have found this true in our own operations. In some instances we have gone farther than that by suggesting that the men change their shoes once daily. In other words, one pair of shoes is worn 4 hours and another worn for 4 hours. This has been extremely effective in our operation.

On the same principle we have found that men packing at a bench where all materials are accessible so that there is no need to move around also tires quickly. In this respect we purposely place items which are not always included in an order a short way from them so that they must from time to time move from their original position, yet not break their speed or pattern of packing. It is much more efficient to have a person move as he works than to have frequent, planned, rest periods to eliminate this tiring.

#### **Power Truck Aids Lighting**

(Continued from Page 15)

overhead equipment. The crane can position the boom and platform for overhead work above machine tools and other obstacles—in locations difficult to reach by other means.

In operation, maintenance man and material are picked up by lowering the boom until the platform rests on the floor. Positive mechanical linkage on the boom keeps the platform parallel with the floor at all times, regardless of boom evaluation. For maxmum coverage from a given aisle location, the boom can be extended to lengths up to 19 feet and swing in a 270° arc.

This same crane truck also is used for outdoor maintenance work. Here, it can reach from the street over grass and sidewalks to service the Company's street lighting equipment.

-Photo and Data Courtesy The Yale & Towne Manufacturing Co.

#### SIPMHE October Convention

(Continued from Page 14)

holding the short course, as they did in 1948.

Dean Everitt's talk will focus on the broad theme for this year's program, "Packaging and Materials Handling Cost Reduction as a Basic Factor in Maintaining Industrial and Business Profits."

Monday afternoon's session will tell "The Integrated Packaging, Materials Handling, Warehousing and Distribution Story." Talks, case studies, slides and demonstrations will picture the correlation.

The Tuesday morning session will be built around a case study of consumer packaging, under the direction of a nationally known packaging designer. The afternoon will be devoted to a materials handling and production review. It will cover such matters as cost estimating, plant layout and work simplification, principles of quality preservation, handling of hazardous materials, and the tieup among these and other factors. Speakers will be drawn both from the Illinois engineering and commerce-college staffs and also from industry.

Wednesday morning's program will comprise an industry and transportation packaging review, both domestic and export. The afternoon session will be of the same sort, but on the subject of materials handling. Speakers at both sessions will discuss new equipment and methods and their possibilities for cost reduction. The purchaser's and user's viewpoint will be stressed as experts set forth the comparative merits of competing equipment, fuels, containers, and processes.

Thursday's sessions will consider problems of special current interest. These are being determined by a survey of the Society's nationwide membership which is now under way.

The annual dinner will begin at 7 p.m. on Wednesday, Oct. 15.

University of Illinois men who are playing an active part in planning the short course are Professors Norman A. Parker and Kenneth J. Trigger of the mechanical engineering staff, and Robert K. Newton and Henry Dekker of the Division of University Extension.

#### Freight Claim Div. Meeting

(Continued from Page 15)

definitely forestalled much damage that might otherwise have been added to the loss bill. He concluded that it remains the railroad goal in the highly competitive transportation field to give good service with the very minimum of delay and loss of damage.

A shipper's viewpoint on damage prevention was presented by Charles W. Braden, of New York City, general traffic manager of the National Distillers Products Corporation. Pointing out that shippers are mainly responsible for good packaging and much of the JUST PRESS

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car loading of goods, Mr. Braden said that his company has tested many different methods of loading cartons and has found that "unitizing" the load by paper bonding has effectively cut down on damage.

Mr. Braden said that a "task force" set up by his firm to give special attention to damage prevention has found that most freight damage occurs in a relatively few cars. In such cars, inspection revealed such damage causes as loose stowage, poor arrangement of the load, and faulty doorway protection, he added.

Another shipper, E. A. Olson, of Chicago, general traffic manager of Libby McNeill and Libby, teamed up with the A.A.R. canned goods specialist, A. J. Kraska, also of Chicago, in a discussion of prevention of damage to canned goods. Mr. Kraska said that about 250,000 carloads of canned goods would probably be moved this year, making it all the more important that such discoveries be put into effect as the fact that cans with wide, deep beads are far more resistant to damage than the ordinary type.

P. K. Partee, of New York City, general manager of the Baltimore & Ohio Railroad, said during a discussion on inspecting and reporting freight damage that "prevention actually begins at destination of shipments." He called for clearer reports on the causes of freight damage as revealed when cars are unloaded.

Double-Page picture story: Using The Pallet With Unit Loads: Coming In Our August Issue. This is a follow-up to Harland Black's story on pages 12-13 of the current issue.

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